

PART 6

EXHIBIT "E"

**FUGITIVE DUST CONTROL
REQUIREMENTS**

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1.0 FUGITIVE DUST CONTROL PLAN:

- 1.1 The Contractor shall develop a Dust Control plan based on the requirements stated in this document for controlling fugitive dust emissions and ensuring compliance with standards and site-specific limits defined in this document.
- 1.2 The Contractor shall submit the Dust Control Plan to Fluor Daniel Fernald for compliance review. This plan shall be part of the "Safe Work Plan" (See Part 7, ACR-002 for the outline of the "Safe Work Plan"). The Dust Control Plan shall demonstrate the Contractor's understanding of the importance of dust suppression on this project. It shall be adequate for all work areas. Fluor Daniel Fernald's compliance review of this plan does not relieve the Contractor of any responsibilities regarding the suppression of dust under the terms of this subcontract. This plan shall include but not be limited to the following:

A listing of specific types and quantities of equipment to be used to suppress dust.

A listing of proposed methods and materials that will be used to proactively suppress dust and the frequency that routine dust suppression is to take place.

A narrative description of how the Contractor field personnel will implement the Dust Control Plan and how they will monitor for excessive or visible dust including how records will be kept and where they will be maintained

A description of the notification process that the Contractor intends for Fluor Daniel Fernald (FDF) to utilize during non-work periods to inform the Contractor of a Dust Alert.

2.0 FUGITIVE DUST CONTROL REQUIREMENTS:

- 2.1 The Contractor shall proactively suppress dust releases from each field activity by applying Best Available Technology (BAT) dust control, such as the application of water, dust suppression agents, or other appropriate methods approved by appropriate FDF personnel and/or implementing BAT work practices at the beginning and during each field activity.

Project field activities shall be continuously monitored by the Contractor for visible emissions.

FDF will provide Opacity monitoring for each project and forward the information to the Contractor.

All dust-generating field activities in an observed area shall cease immediately if a fugitive dust limit is exceeded. An increase in BAT dust controls and/or work practices shall be implemented to bring the fugitive dust emissions below the limit during dust-generating activities (including wind erosion). Work shall not be restarted until FDF is completely satisfied that the method to suppress the fugitive dust has been executed by the contractor.

- 2.2 The Contractor shall have personnel on-call as defined in the plan during non-work periods seven (7) days per week (including holidays) to respond to an off hours dust alert. The Contractor shall provide a schedule of personnel that will be on-call during non-work periods. Dust suppression is to begin no more than two (2) hours after notification by FDF during non-work periods.

The Contractor shall utilize adequate BAT dust control method to bring the fugitive dust emissions

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below the standard or site specific limit during dust-generating activities (e.g. wind erosion).

The Contractor shall not leave the site with out FDF concurrence that sufficient controls are in place.

2.3 Activities May Include:

Some of the activities which may require dust suppression are as follows:

- Hauling material and equipment
- Vehicle and equipment traffic
- Excavation
- Trenching
- Loading/Unloading
- Transportation to Defined Roadway (paved or unpaved)
- Load-in/Load-out on Storage Piles
- Material Placement in OSDF
- Vehicle Traffic on Storage Piles
- Wind Erosion from Working Faces

2.4 Definitions:

Paved Roadway or Paved Parking Area: a predetermined area designed and improved specifically for vehicle traffic. Improvements to the predetermined area are the application of materials such as asphalt or concrete that forms a firm level surface for travel.

Unpaved Roadway or Unpaved Parking Area: a predetermined area designed and improved specifically for vehicle traffic. Improvements to the predetermined area include the application of gravel, shredded shingles, cinders, compaction, etc. to the delineated area.

Wind Erosion of Storage Piles: fugitive emissions from storage piles strictly created by the wind (and not by material handling equipment or vehicle traffic).

Visible Particulate (Fugitive) Emissions: visible airborne particulate that are generated from the operation of heavy equipment, equipment wheels or tracks, any tools, or vehicle wheels. Visible particulate emissions are also those generated by wind erosion. (Regulatory methods that will be used for visual determination of fugitive emissions are 40 CFR 60 Appendix A, Method 9 (used by FDF) "Visual Determination of Opacity of Emissions from Stationary Sources" and Method 22 (used by the contractor) "Visual Determination of Fugitive Emissions from Materials Sources and Smoke Emission from Flares".)

Material Handling/Vehicle Traffic on Storage Piles: includes activities such as loading in and loading out of materials, excavation, and vehicle traffic on storage piles. Fugitive emissions created by the above activities on storage piles shall be subjected to the standard defined in this section. Fugitive emissions that can not be distinguished between material handling activities and wind erosion will be also subjected to the standard defined in this section.

2.5 Site-Specific Limit:

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The Contractor shall apply the following Site-Specific Limits:

Visible particulate emissions from any paved roadway or paved parking area shall not exceed one minute during any sixty-minute observation period.

Visible particulate emissions from any unpaved roadway, unpaved parking area, project field activities, or wind erosion from storage piles shall not to exceed three minutes during any sixty-minute observation period.

The Contractor shall verify compliance with these limits using 40 CFR Part 60 Appendix A, Method 22 "Visual Determination of Fugitive Emissions from Materials Sources and Smoke Emissions from Flares".

2.6 Actions:

The Contractor shall apply the following.

At the start of each day and periodically during the day project personnel (FDF and contractor) shall tour paved and unpaved roads, paved and unpaved parking areas, storage piles, and areas where project field activities that are taking place and proactively apply BAT fugitive dust controls and/or work practices to minimize dust generation.

Before fugitive emissions are visible, BAT dust controls and/or work practices must be implemented or increased.

If the limit is exceeded, all mechanical dust-generating activities such as traffic on roadway in the observed area must cease immediately. An increase of BAT dust controls and/or work practices shall be implemented to bring the fugitive emissions to, at a minimum, below the limit during dust-generating activities (including wind erosion).

2.7 BAT Dust Controls/Work Practices:

The contractor shall implement the following BAT Dust Control/Work Practices as applicable:

Seal off roll work areas, stock piles, working piles, etc. before the end of each shift.

In dry conditions initiate dust control before each work shift and during lunch breaks.

Wet sweep or otherwise remove any clods, clumps, tracks, or visible deposits of soil or mud from paved roadways or paved parking areas, applying appropriate dust control measures to suppress the generation of visible dust that may result from the sweeping or removal process.

Remove, as practical, any clods, clumps, tracks, or visible deposits of soil or mud from unpaved roadways or unpaved parking areas, applying appropriate dust control measures to suppress the generation of visible dust that may result from the removal process.

Repair or resurface roadways/parking areas as needed or use an alternative road surface as a last resort for unpaved roadways and parking areas.

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Maintain roadway shoulders.

Minimize the amount of unnecessary traffic on roadways, parking areas and areas around field activities.

Limit speed to 15 miles per hour operation of vehicles or equipment.

Reduce the speed limit as required to minimize dust generation.

Apply appropriate dust suppression agents such as water or surfactant to the materials being transported by truck load beds to ensure the transported materials will not become airborne. Soil and soil like material shall not be visible above the vehicle body.

Always cover truck load beds when transported materials are still likely to become airborne.

Change configuration of material being transported (e.g. place less in truck).

Minimize the height of drop during loading and unloading.

Application of dust suppression materials approved by FDF such as: water, resin, or equivalent combination of surfactant or crusting agents.

Storage piles may be covered with a tarpaulin, plastic, etc., if practical.

For extended periods of planned inactivity, vegetate if protective cover or periodic application of surfactant or crusting agents proves ineffective.

Change method of excavation/transport (e.g., from a front-end loader dumping into a truck to a self-propelled pan) when feasible.

Wheel washing.

3.0 TRAINING

- 3.1 Contractor personnel shall review and understand the information contained in this document and shall be trained in the plan pertaining to an individual's responsibilities.
- 3.2 The Contractor shall designate individuals that will require the appropriate training.
- 3.3 Personnel involved in performing compliance surveillances to ensure fugitive dust emissions from project field activities are meeting fugitive dust standards or limits, must have the following FDF provided training:

40 CFR 60, Appendix A, Method 22 - "Visual Determination of Fugitive Emissions from Material Sources and Smoke Emission from Flares".

4.0 RECORDS

- 4.1 The Contractor shall complete an entry to the "Control of Fugitive Emissions- Daily Record" form

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(Attachment "1") each time an application of dust suppression material is performed and submit the completed forms to FDF weekly.

Enter on form:

identification of area that was treated and/or cleaned. Record using sketch on back of the form, or by attaching similar diagram at appropriate scale.

the date the designated area was treated and/or cleaned.

the manner the designated area was treated and/or cleaned.

the application rate of dust suppression material (at a minimum, the tank truck load capacity and number of truckloads applied per unit of time per area (or segment) to which applied).

the equipment operator (at a minimum, the name of the contractor or subcontractor firm).

- 4.2 The Contractor shall document the "Visual Determination of Fugitive Emission" on the Contractor Daily Activity Report, Exhibit "1" of Part 4 - Special Terms and Conditions, when performing visible emission monitoring for paved and unpaved roadways, paved and unpaved parking areas, and wind erosion from storage piles and submit the completed forms to FDF daily.

Exhibit E
Attachment "1"

Date: _____

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